

# NHDOT SPR2 PROGRAM

## RESEARCH PROGRESS REPORT

**INSTRUCTIONS:**

*Project Managers and/or research project investigators should complete a progress report at least every three months during the project duration. Reports are due the 5<sup>th</sup> of the month following the end of the quarter. Please provide a project update even if no work was done during this reporting period.*

<b>Project #</b> 26962J		<b>Report Period</b> Year: 2017 <input type="checkbox"/> Q1 (Jan-Mar) <input checked="" type="checkbox"/> Q2 (Apr-Jun) <input type="checkbox"/> Q3 (Jul-Sep) <input type="checkbox"/> Q4 (Oct-Dec)	
<b>Project Title:</b> UAS and Transportation Projects			
<b>Project Investigator:</b> Jarlath O'Neil-Dunne <b>Phone:</b> 802-656-3324		<b>E-mail:</b> joneildu@uvm.edu	
<b>Research Start Date:</b>  December 1, 2016	<b>Research End Date:</b>  September 30, 2019	<b>Project schedule status:</b>  <input checked="" type="checkbox"/> On schedule <input type="checkbox"/> Ahead of schedule <input type="checkbox"/> Behind schedule	

**Brief Project Description:**

The overall objective of this project is to evaluate UAS technology for a broad range of case studies relating to the specific needs of the New Hampshire Department of Transportation (NH DOT). Specifically, this project seeks to:

1. Determine the types of transportation projects for which UAS are best suited for.
2. Evaluate the capabilities and limitations, along with the costs and benefits, of using UAS technology for a variety of transportation projects.
3. Outline the policies, procedures, staffing, and information technology infrastructure required for NH DOT to fully implement UAS technology.
4. Develop NH DOT's UAS capabilities.

**Progress this Quarter (include meetings, installations, equipment purchases, significant progress, etc.):**

- UAS presentation at the NH DOT Winter Technical Meeting.
- Updated and expanded the list of UAS case studies (Task 2).
- Developed UAS mission planning profiles (Task 3).
- Conducted UAS flight operations (Task 4).
- Generated UAS products (Task 5).

Provide UAS products to NH DOT (Task 6).

**Items needed from NHDOT (i.e., Concurrence, Sub-contract, Assignments, Samples, Testing, etc...):**

- Participation in case studies.

**Anticipated research next 3 months:**

- UAS mission planning profiles (Task 3).
- UAS operations (Task 4).
- Generate UAS products (Task 5).
- Provide UAS products to NH DOT (Task 6).

**Circumstances affecting project: Describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope, and budget, along with recommended solutions to those problems.**

Weather has interfered with some flight operations, but there has been no impact to the overall project schedule.

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<b>Tasks (from Work Plan)</b>	<b>Planned % Complete</b>	<b>Actual % Complete</b>
Task 1: Establish a stakeholder advisory committee	100%	100%
Task 2: UAS Case Studies	100%	100%
Task 3: UAS Mission Planning Profiles	100%	100%
Task 4: UAS Operations	30%	40%
Task 5: UAS Products	30%	30%
Task 6: Provide UAS Products to NH DOT	20%	20%
Task 7: Implementation Assessment	0%	5%
Task 8: Reporting	0%	5%